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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------------|------------------|
| 10/725,242 | 12/01/2003 | Paul Rickers | 1179-021 | 1952 |
| 20874 | 7590 | 12/05/2005 | | |
| WALL MARJAMA & BILINSKI 101 SOUTH SALINA STREET SUITE 400 SYRACUSE, NY 13202 | | | EXAMINER BROWN, DREW J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3616 | |

DATE MAILED: 12/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/725,242 | | RICKERS, PAUL | |
| | Examiner | | Art Unit | |
| | Drew J. Brown | | 3616 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/28/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because there is no reference numeral for the arrow under numeral 30 in Figure 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: In line 4 of page 3, reference is made to claim 2, but it is not acceptable to make reference to claims in the specification.

Appropriate correction is required.

Claim Objections

3. Claim 1 is objected to because of the following informalities: In line 2, "fro" should be changed to --for--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 2-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 2 recites the limitation "The four-wheel industrial truck" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abels (DE10118442) in view of Knight et al. (U.S. Pat. No. 4,364,449) and Schramm et al. (U.S. Pat. No. 6,272,420 B1).

Abels discloses a four-wheel industrial truck with a swing axle (2) for the rear wheels, a drive, and a control device for the drive that generates an actuating signal for the drive in response to a generator signal. A stop (3a, 3b) is provided on the bodywork (1) of the industrial

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truck that cooperates with the body of the swing axle. A sensor (4) is arranged on the axle stop and coupled to the control device so as to reduce the drive torque of the drive when the sensor sends the signal.

Abels does not disclose that a switch is used rather than a sensor. However, Knight et al. discloses the use of a switch (column 2, lines 21-34). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a switch rather than a sensor in order to reduce the cost and complexity of the device while still generating the same signal when using a sensor.

Abels discloses that the control device is connected with a drive control and/or a steering control and/or a signal emission device, wherein the danger of overturning is counteracted through the drive wheels. However, Abels does not specifically disclose that the drive torque is reduced. Schramm et al. does disclose that the drive torque can be reduced (column 14, lines 54-59). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the drive torque of the drive in order to stabilize the vehicle without the use of brakes, since the brakes may not be reliable due to damage or excessive use.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abels in view of Ishikawa et al. (U.S. Pat. No. 6,179,304 B1) and Schramm et al.

The combination of Abels and Schramm et al. discloses the claimed invention as discussed above but does not disclose that a rotary pulse generator is arranged in the plane of rotation of the swing axle that sends the signal to reduce the torque when the signal of the rotary pulse generator reaches a predetermined level.

However, Ishikawa et al. does disclose a rotary pulse generator (column 5, lines 15-19). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a rotary pulse generator so the tilting of the vehicle can be monitored and stabilized without having to wait for a contact switch to be actuated.

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abels in view of Ishikawa et al. and Schramm et al, and further in view of Claxton (U.S. Pat. No. 5,997,013).

The combination of Abels, Ishikawa et al., and Schramm et al. discloses the claimed invention as discussed above but does not disclose that each driven wheel has a driving motor.

However, Claxton does disclose that each driven wheel has a driving motor (Figure 7 and column 4, lines 19-22). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the combination of Abels in view of the teachings of Claxton to have individual motors for each drive wheel in order to increase the maneuverability of the vehicle by allowing the driven wheels to rotate at different rates.

11. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abels in view of Ishikawa et al. and Schramm et al, and further in view of Claxton, Wielenga (U.S. Pat. No. 6,065,558), and Knight et al.

The combination of Abels, Ishikawa et al., Schramm et al., and Claxton discloses the claimed invention as discussed above but does not disclose that the truck has a braking device controlled by a brake control device, wherein the signal of at least one switch and rotary pulse generator is provided to the brake control device.

However, Wielenga does disclose a braking device with a brake control that actuates the brakes according to a rollover signal (Abstract). Therefore, it would have been obvious to one

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having ordinary skill in the art at the time the invention was made to include a braking system to help stabilize the vehicle in order to ensure that the vehicle does not tip in case the drive torque reduction is not sufficient.

Abels does not disclose that a switch is used rather than a sensor. However, Knight et al. discloses the use of a switch (column 2, lines 21-34). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a switch rather than a sensor in order to reduce the cost and complexity of the device while still generating the same signal when using a sensor.

With respect to claim 5, Wielenga discloses that the brake control device can trigger the brakable wheels separately and that the brake control device brakes the outer wheel (Abstract).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Brown et al., Sutherland, Leimbach, Eull, Pettersson, Drummond et al., Ito, and Champeau disclose similar swing axles for four-wheeled trucks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew J. Brown whose telephone number is 571-272-1362. The examiner can normally be reached on Monday-Thursday from 7 a.m. to 4 p.m..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Drew J Brown
Examiner
Art Unit 3616

DJB


PAUL N. DICKSON
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